UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,773	01/22/2002	Bernard A. Traversat	5681-06800	8752

7590 11/22/2006

Robert C. Kowert
Conley, Rose & Tayon, P.C.
P.O. Box 398
Austin, TX 78767-0398

EXAMINER	
HAMZA, FARUK	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 11/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/055,773	TRAVERSAT ET AL.	
	Examiner	Art Unit	
	Faruk Hamza	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-116* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-116* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *01/17/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. This action is responsive to the amendment filed on April 17, 2006. Claims 100 and 116 have been amended. Claims 1-116 are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 101-116 are rejected under 35 U.S.C. 101 because these claims are directed to software. Software is not tangible and does not belong to one of the statutory category. See MPEP 2106.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-116 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of Patent No 7,065,579 [hereinafter as '579 patent]. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

Taking claim 1 as an exemplary claim, the instant application contains the subject matter claimed in the '579 patent. As per claim 1, the applications are claiming common subject matter as follows:

A peer computing system, comprising:

a plurality of peer nodes ...;

wherein the plurality of peer nodes are ....

The claims of '579 patent do not specifically state service layer as described in the claims of the instant application but it would have been obvious to a person skill in the art to recognize that the mechanism for accessing services of '579 patent is the similar in functionality to the service layer of the instant application because it would enable peer nodes to access to resources or services of other nodes within a peer group.

As per independent claims 36,53,55-59,73,75-77,97,99-101 and 114-116 they are also directed to the same subject matter recited in claim 1 above. Accordingly, they are provisionally rejected under the judicially created doctrine of obviousness-type double patenting.

As per dependent claims 2-35,37-52,60-72,74,78-96,98 and 02-113 they depend on the rejected claims. Accordingly, they are rejected under the judicially created doctrine of obviousness-type double patenting.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3,6,8-13,15,17-22,25-30,32-38,40-42,44-45,47-60,62-63,65-80,82-84,86-87,89-90,92-101,103-104,106-108,110-116 are rejected under 35 U.S.C. 102(e) as being anticipated by Weisman et al. (U.S. Pub. No. 2002/0112058) hereinafter referred as Weisman.

Weisman teaches the invention as claimed including a device hosting framework provides hosting for software-implemented logical devices on computer to expose their services as controlled devices per a peer networking protocol (See abstract).

As to claim 1, Weisman teaches a peer computing system comprising:

a plurality of peer nodes operable to couple to a network (Fig. 1, P[0033]);

wherein the plurality of peer nodes are configured to implement a peer-to-peer environment on the network according to a peer-to-peer platform comprising (abstract, Fig. 1, P[0005-0007]):

a core layer comprising one or more peer-to-peer platform protocols for enabling the plurality of peer nodes to discover each other (P[0002], P[0033]), communicate with each other ([Fig. 1, P[0038,0043,0045]), and cooperate with each other to form peer groups and share content in the peer-to-peer environment (P[0044,0045,0085,0803,0804]);

a service layer comprising one or more core services each provided by one or more of the plurality of peer nodes in the peer-to-peer environment (Fig. 1,

Fig. 9,P[0113-0117]), wherein at least a subset of the core services are operable to be used by the plurality of peer nodes in forming and participating in the peer groups (Fig. 4, P[0062-0065]), and wherein each of the one or more core services are configured to be accessed by the plurality of peer nodes in accordance with at least one of the one or more peer-to-peer platform protocols (P[0006]); and

an application layer comprising one or more applications each provided by one or more of the plurality of peer nodes in the peer-to-peer environment wherein each of the one or more applications are configured to be accessed in accordance with at least one of the one or more peer-to-peer platform protocols, and wherein at least a subset of the one or more applications are each configured to access at least one of the one or more core services to perform application tasks in the peer-to-peer environment in accordance with at least one of the one or more peer-to-peer platform protocols (Fig. 1, P[0003-0006,0033]).

As to claim 2, Weisman teaches the peer computing system as recited in claim 1, wherein the service layer further comprises one or more other services that are not core services in the peer-to-peer environment (P[0002-0003]).

As to claim 3, Weisman teaches the peer computing system as recited in claim 1, wherein each of the one or more peer-to-peer platform protocols defines

one or more advertisement formats for describing and publishing advertisements for resources in the peer-to-peer environment (P[0849]).

As to claim 5, Weisman teaches the peer computing system as recited in claim 1, wherein at least a subset of the one or more peer-to-peer platform protocols defines one or more message formats configured for use in exchanging messages between the peer nodes in accordance with the particular protocol (P[0813]).

As to claim 6, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes one or more of:

a peer discovery protocol for discovering resources in the peer-to-peer environment (P[0839-0840,0034,0050]);

a peer membership protocol for use by the peer nodes in applying for membership in the peer groups (P[0069-0074,0034,0050]);

a peer resolver protocol for use in sending search queries from one peer group member to another peer group member (P[0813,0034,0050]);

a peer information protocol for enabling the peer nodes to obtain information about capabilities and status of other peer nodes in the peer-to-peer environment (P[0813-0814,0034,0050]);

a pipe binding protocol for use in finding the physical location of pipe endpoints and binding the pipe endpoints, wherein pipes are communications channels between one or more of the peer nodes, the core services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels (P[0153-0154,0034,0050]); an

endpoint routing protocol for enabling the peer nodes to request peer routing information to reach the other peer nodes (P[0839-0843,0034,0050]); and

a peer rendezvous protocol for enabling peer nodes to propagate query messages to a next set of peer nodes (P[0376,0034,0050]).

As to claim 8, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the peer nodes in the peer-to-peer environment (P[0839-0843]).

As to claim 9, Weisman teaches the peer computing system as recited in claim 8, wherein the one or more peer-to-peer platform protocols define a peer advertisement format configured for use in advertising the peer nodes in the peer-to-peer environment, wherein said discovering the peer nodes returns one or more peer advertisements for the discovered peer nodes formatted in accordance with the peer advertisement format (P[0849-0852]).

As to claim 10, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the peer groups in the peer-to-peer environment (P[0849-0852]).

As to claim 11, Weisman teaches the peer computing system as recited in claim 10, wherein the one or more peer-to-peer platform protocols define a peer group advertisement format configured for use in advertising the peer groups in the peer-to-peer environment, wherein said discovering the peer groups returns one or more peer group advertisements formatted in accordance with the peer group advertisement format (P[0849-0852]).

As to claim 12, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for enabling the peer nodes to discover and exchange content in the peer-to-peer environment (P[0849-0852]).

As to claim 13, Weisman The peer computing system as recited in claim 12, wherein the one or more peer-to-peer platform protocols define a content advertisement format configured for use in advertising the content in the peer-to-peer environment, wherein said discovering content returns one or more content

advertisements formatted in accordance with the content advertisement format (P[0849-0852]).

As to claim 15, Weisman teaches the peer computing system as recited in claim 14, wherein the one or more peer-to-peer platform protocols define a pipe advertisement format configured for use in advertising pipes in the peer-to-peer environment, wherein said discovering pipes returns one or more pipe advertisements formatted in accordance with the pipe advertisement format (P[0849-0852, 0376]).

As to claim 17, Weisman teaches the peer computing system as recited in claim 16, wherein the one or more peer-to-peer platform protocols define an endpoint advertisement format configured for use in advertising endpoints in the peer-to-peer environment, wherein said discovering endpoints returns one or more endpoint advertisements formatted in accordance with the endpoint advertisement format (P[0849-0852]).

As to claim 18, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a discovery protocol for discovering the core services and other services provided by the peer nodes in the peer-to-peer environment (P[0839-0843]).

As to claim 19, Weisman teaches the peer computing system as recited in claim 18, wherein the one or more peer-to-peer platform protocols define a service advertisement format configured for use in advertising the core services and the other services provided by the peer nodes in the peer-to-peer environment, wherein said discovering the core services and the other services returns one or more service advertisements formatted in accordance with the service advertisement format (P[0849-0852]).

As to claim 20, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a peer membership protocol for use by the peer nodes in applying for membership in one or more of the peer groups (P[0069-0074,0034,0050]).

As to claim 21, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include a peer resolver protocol for use in sending generic search queries from one peer node to one or more other peer nodes in the peer-to-peer environment (P[0813,0034,0050]).

As to claim 22, Weisman teaches the peer computing system as recited in claim 21, wherein the search queries are sent to one or more services configured to perform searches as specified by the search queries and to generate

responses to the search queries, wherein the one or more services are each hosted by one of the one or more other peer nodes (P[0813,0034,0050]).

As to claim 25, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols include an endpoint routing protocol for enabling the peer nodes to request peer routing information to reach other peer nodes (P[0034,0050]).

As to claim 26, Weisman teaches the peer computing system as recited in claim 25, wherein, in said requesting peer routing information, the peer nodes are configured to use the endpoint routing protocol to send route query request messages formatted in accordance with the endpoint routing protocol to one or more router peers to request the peer routing information (P[0813,0034,0050]).

As to claim 27, Weisman teaches the peer computing system as recited in claim 26, wherein each of the router peers is configured to cache route information for one or more routes in the peer-to-peer environment, and wherein each of the router peers is further configured to return route information for a particular route specified by a particular route query request message if the route information for the particular route is cached by the particular router peer (P[0155,0185]).

As to claim 28, Weisman teaches the peer computing system as recited in claim 27, wherein each of the router peers is further configured to forward the route query request message to other router peers if the route information for the particular route is not cached by the particular router peer (P[0126,0138-0139]).

As to claim 29, Weisman teaches the peer computing system as recited in claim 1, wherein the one or more peer-to-peer platform protocols includes a peer information protocol for enabling the peer nodes to obtain information about capabilities and status of other peer nodes in the peer-to-peer environment (P[0813-0814,0034,0050]).

As to claim 30, Weisman teaches the peer computing system as recited in claim 1, wherein each peer group is a collection of cooperating member peer nodes that provides a common set of services to the member peer nodes in the peer-to-peer environment (P[0813-0814,0034,0050]).

As to claim 32, Weisman teaches the peer computing system as recited in claim 30, wherein the peer-to-peer platform protocols include a discovery protocol, wherein the common set of services on at least a subset of the peer groups includes a discovery service for use by member peer nodes in said peer group to discover advertised resources including peer nodes and peer groups in

the peer computing system in accordance with the discovery protocol (P[0839-0843,0849-0852]).

As to claim 33, Weisman teaches the peer computing system as recited in claim 30, wherein the peer-to-peer platform protocols include a membership protocol, wherein the common set of services on at least a subset of the peer groups includes a membership service for use by member peer nodes in said peer group to reject or accept group membership applications in accordance with the membership protocol (P[0069-0074,0034,0050]).

As to claim 34, Weisman teaches the peer computing system as recited in claim 30, wherein the common set of services includes one or more user-defined services (P[0002-0003,0034,0050]).

As to claim 35, Weisman teaches the peer computing system as recited in claim 1, wherein each of the plurality of peer nodes includes a unique identifier configured for use in distinguishing each peer node from the other peer nodes in the peer-to-peer environment (P[0057,0107,0206]).

Claims 36-38,40-42,44-45,47-60,62-63,65-80,82-84,86-87,89-90,92-101,103-104,106-108 and110-116 do not define or teach any new limitations

other than above claims 1-3,6,8-13,15,17-22,25-30,32-35. Therefore rejected for similar reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 4,7,14,16,23,24,31,39,43,46,61,64,81,85,88,91,102,105 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weisman as applied above, and further in view of Ferguson et al. (U.S. Patent Number 6,490,618) hereinafter referred as Ferguson.

Weisman teaches the invention substantially as claimed including a device hosting framework provides hosting for software-implemented logical devices on computer to expose their services as controlled devices per a peer networking protocol (See abstract).

As to claim 4, Weisman teaches the peer computing system as recited in claim 3, wherein the resources include one or more of the peer nodes, the peer groups, the content, the core services, other services in the service layer, the applications, pipes, and pipe endpoints (P[0004,0036]).

Weisman does not explicitly teach wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels.

Ferguson teaches wherein the pipes are communications channels between one or more of the peer nodes, the core services, the other services and the applications in the peer-to-peer environment, and wherein the pipe endpoints are network interfaces on the peer nodes that are configured to be bound to the pipes to establish the communications channels (Column 5, lines 37-64).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to modify Weisman by adding functionality for pipes to establish communication channels, which would allow the system to communicate among mixed entities in peer-to-peer computing network. One will be motivated to do so to enhance system's performance.

Claims 7,14,16,23,24,31,39,43,46,61,64,81,85,88,91,102,105 and 109 do not define or teach any new limitations other than above 4. Therefore rejected for similar reasons.

6. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context.

Response to Arguments

7. Applicant's arguments with have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER